

ABSTRACT OF THE DISCLOSURE

A phase frequency detector used in a phase locked loop includes a phase error detecting unit for outputting phase error signals according to a phase error between a first input signal and a second input signal, and a reset unit coupled to
5 the phase error detecting unit. The reset unit outputs reset signals according to the first and second input signals so as to reset the phase error detecting unit without delay time. Thus, it is possible to make the output timing of the phase error signal in a more precisely linear proportion to the phase error value and to enhance the sensitivity of the phase locked loop.